

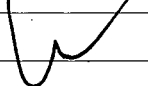
Work Order ID 50102

July 08, 2009 11:17:11 AM

Page 1

Item ID: D3391-025 Accept Setup Start
Revision ID: H
Item Name: Aft Tube Assembly Stop
Start Date: 7/10/2009 Start Qty: 1.00 Cust Item ID:
Required Date: 7/31/2009 Req'd Qty: 1.00 Customer:

Reference:

Approvals: Process Plan:  Date: _____ Tooling: _____ Date: _____ Run Start
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	Rev H								

100 0.00
MORI SEIKI CNC LATHE LARGE
Mori Seiki Memo 0.00
Mori Seiki CNC Lathe Large Turn as per Folio FA599 Rev: AA & Dwg D3391 Rev: H

A.M 09-07-15 ①

110 0.00
QC2- Inspect parts off machine FAI/FAIB
QC Memo 0.00
Quality Control

A.M 09-07-15 ①

111 0.00
QC8- Inspect parts - second check
QC Memo 0.00
Quality Control

=> 8 09/07/15 ①① φ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

July 08, 2009 11:17:11 AM

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run	Start
	Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	HAAS CNC VERTICAL MACHINING #1	0.00				1	0		
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine as per Folio FA 599 Rev: <u>H</u> 2-Deburr			<u>H</u>					
				N.A 09/08/11					
130	QC2- Inspect parts off machine FAI/FAIB	0.00				1	0		
QC	Memo	0.00							
Quality Control				N.A 09/08/11					
140	QC8- Inspect parts - second check	0.00				1	0		
QC	Memo	0.00							
Quality Control				SN 09/08/11					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Work Order ID 50102

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Item ID: D3391-025 Accept Setup Start
Revision ID: H
Item Name: Aft Tube Assembly Stop
Start Date: 7/10/2009 Start Qty: 1.00 Cust Item ID:
Required Date: 7/31/2009 Req'd Qty: 1.00 Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start
QC: Date: SPC (Y/N): Date: Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Skidtubes	0.00							
	Skidtubes								
	Skidtubes								
	Memo	0.00							
	1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803								
160	BENDING MACHINE - SKIDTUBES	0.00							
	CNC Bend 1								
	CNC Delta 100 Bender								
	Memo	0.00							
	Form as per Dwg D3391 Using Bend Prog 3391025								
170	QC5- Inspect part completeness to step on W/O	0.00							
	QC								
	Quality Control								
	Memo	0.00							

N/A was done at
Seq. #120

9-8-19

809/08/19

h=4.04

ⓧ

9/8/18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Work Order ID 50102

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Item ID: D3391-025

Accept

Setup Start

Revision ID: H

Stop

Item Name: Aft Tube Assembly

Start Date: 7/10/2009 Start Qty: 1.00

Cust Item ID:

Required Date: 7/31/2009 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Skidtubes	0.00				<u>0</u>			
Skidtubes	Memo	0.00							
Skidtubes	1-Open Aft cap pilot hole to .208" as per Dwg D3391								
	2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only.								
	3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217 Wearplate Jig . *****Do Not Open To Finished Size*****								
	4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2 previously drilled aft wearplate holes.								
	5-Open wearplate holes to 0.250" and c'bore as per dwg D3391								
	6-Open up all wearshoe , wearplate to 0.297"and float bag holes to 0.328" as per Dwg D3391.								
	7-Deburr								

H 9/8/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 50102

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Item ID: D3391-025

Accept

Setup Start

Revision ID: H

Stop

Item Name: Aft Tube Assembly

Start Date: 7/10/2009 Start Qty: 1.00

Cust Item ID:

Required Date: 7/31/2009 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00	2) 8 09/08/19			(40)	6		
200	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish Hand Finishing	Memo	0.00	u 9/8/19			(1)			
210	QC3- Inspect Part Finish	0.00							
QC Quality Control	Memo	0.00				(1)		86 09/02/20	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

July 08, 2009 11:17:11 AM

Accept

Setup Start

Stop

Start Date: 7/10/2009 **Start Qty:** 1.00

Cust Item ID:

Required Date: 7/31/2009 **Req'd Qty:** 1.00

Customer:

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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220

Skidtubes

0.00

Skidtubes

Memo

0.00

Skidtubes

Instal spacers as per dwg D3391

A/R Magnabond 6398 Batch: M11249

exp. date: 10/8/11

cure time 12hrs as per QSI0015

230

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

240

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Powdercoat

Memo

0.00

Powder Coating

START TIME: 10:38 AM

OVEN TEMPERATURE: 320°

FINISH TIME: 11:00 AM

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 50102

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Item ID: D3391-025
Revision ID: H
Item Name: Aft Tube Assembly
Start Date: 7/10/2009 **Start Qty:** 1.00
Required Date: 7/31/2009 **Req'd Qty:** 1.00

Accept

Setup Start

Stop

Cust Item ID:
Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start

Stop

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	Identify as per dwg & Stock Location: _____	0.00	09-11-3						
Packaging	Memo	0.00							
Packaging									
290	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00	09/11/04						
Quality Control									

09/11/04 ~~10~~

mf 09-11-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

July 08, 2009 11:17:10 AM

Page 1

Work Order ID: 50102

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6014-090RevA		Manufactured	No			100	Each	22.0000	1.0000			

ALUMINUM EXTRUSION

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

LG

22

42768

22

D3670-4-200RevA

Manufactured

No

230

Each

179.0000 4.0000

SPACER

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

179

46106

16

47122

36

48198

42

48269

85

a.m 09-07-15

(4) M 918/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 50102

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2646RevC		Manufactured	No			270	Each	60.0000	1.0000			

Aft Cap

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	60	
20208	0	
43801	2	
46327	8	
48109 ✓	50	

D3537-1RevC

Manufactured No

270 Each 86.0000 1.0000

Wearpad

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	60	
48288	60	
Main Warehouse		
ST	26	
47715	1	
48162	25	

51624

1 BR 09-11-3.

July 08, 2009 11:17:10 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

July 08, 2009 11:17:10 AM

Work Order ID: 50102

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3537-7RevC		Manufactured	No			270	Each	29.0000	1.0000			
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Wearpad

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST	29	
----	----	--

33869	1	
-------	---	--

45408	14	
-------	----	--

46346	14	
-------	----	--

D3553-1RevA		Manufactured	No			270	Each	24.0000	1.0000			
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Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST	24	
----	----	--

33868	24	
-------	----	--

D3553-3RevA		Manufactured	No			270	Each	13.0000	1.0000			
-------------	--	--------------	----	--	--	-----	------	---------	--------	--	--	--

Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST	13	
----	----	--

33870	5	
-------	---	--

47206	8	
-------	---	--

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 50102

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-1RevB		Manufactured	No			270	Each	736.0000	2.0000			

Phenolic Washer

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

736

39275

19

42329

143

47628 ✓

574

ALS4-1032-130

Purchased

No

260

Each

7,799.000 14.0000

2 BR 09-11-3.

Insert

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

7799

110511

7799

ALS4-1032-225

Purchased

No

270

Each

9,205.000 12.0000

X14 MD 09/10/29

Insert

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

9205

107441

28

110768

9177

X12 MD 09/10/29

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Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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July 08, 2009 11:17:10 AM

Work Order ID: 50102

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN3C4A		Purchased	No			270	Each	274.0000	6.0000			
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BOLT

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST 112794	274	
112082	274	

6. BR 09-11-3.

AN3C5A		Purchased	No			270	Each	546.0000	4.0000			
--------	--	-----------	----	--	--	-----	------	----------	--------	--	--	--

Bolt

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST 112041	546	
111424	8	
111707	538	

4. BR 09-11-3.

AN960C10L		Purchased	No			270	Each	4,998.000	10.0000			
-----------	--	-----------	----	--	--	-----	------	-----------	---------	--	--	--

washer

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	4998	
103585	100	
112116	4898	

10. BR 09-11-3.

July 08, 2009 11:17:10 AM

Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: <u>50104</u>
Description: Float Skidtube (412)		Part Number: <u>D3391-3</u>
Inspection Dwg: D3391	Rev: H	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.000	✓			
3.500	+/-0.010	3.495	✓			
88.93	+/-0.030	88.930	✓			
44.995	+/-0.030	45.000	✓			
Ø3.200	+/-0.010	3.201	✓			
88.93	+/-0.030	88.930	✓			
Ø3.750	+/-0.010	3.750	✓			
30° x 160" chamfer	+/-0.010	30° x 160"	✓			

Measured by: A.M. 09-07-15

Date: 09-07-15

Audited by: S096715

Date: 09/07/15

HAAS Section						
1.526	+0.000/-0.030	1.511	✓			
0.200	+/-0.010	0.201	✓			
7.500	+/-0.010	7.502	✓			
27.750	+/-0.010	27.750	✓			
31.750	+/-0.010	31.750	✓			
35.250	+/-0.010	35.250	✓			
3.300	+/-0.010	3.305	✓			
0.200	+/-0.010	0.199	✓			
3.520	+/-0.010	3.515	✓			
0.687	+0.010/-0.000	0.693	✓			
R0.062	+/-0.010	R0.062	✓			
Ø0.484	+0.005/-0.001	Ø0.487	✓			

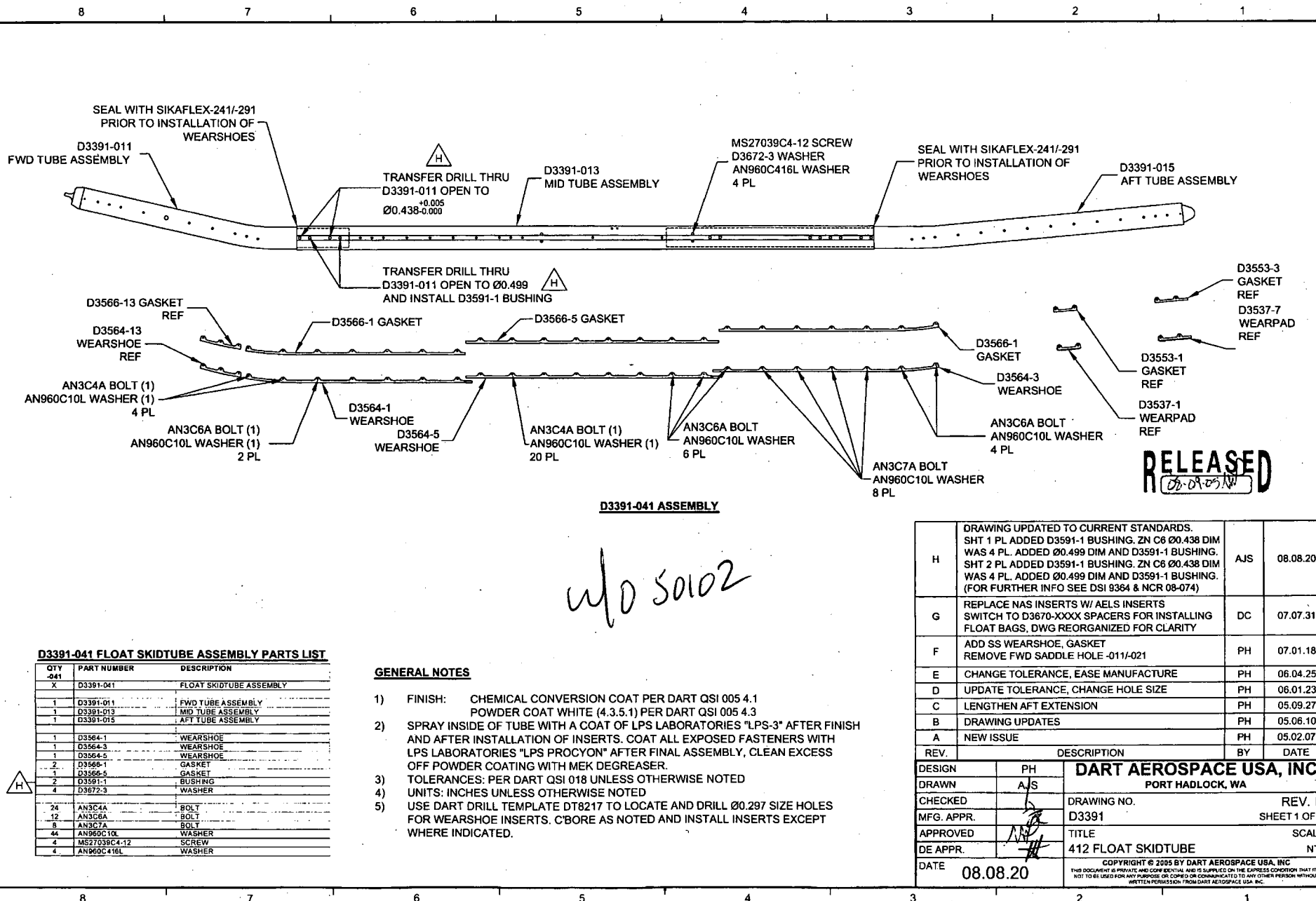
Measured by: A.A.

Date:

Audited by: 09/08/11 SA 09/08/17

Date:

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DB	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	



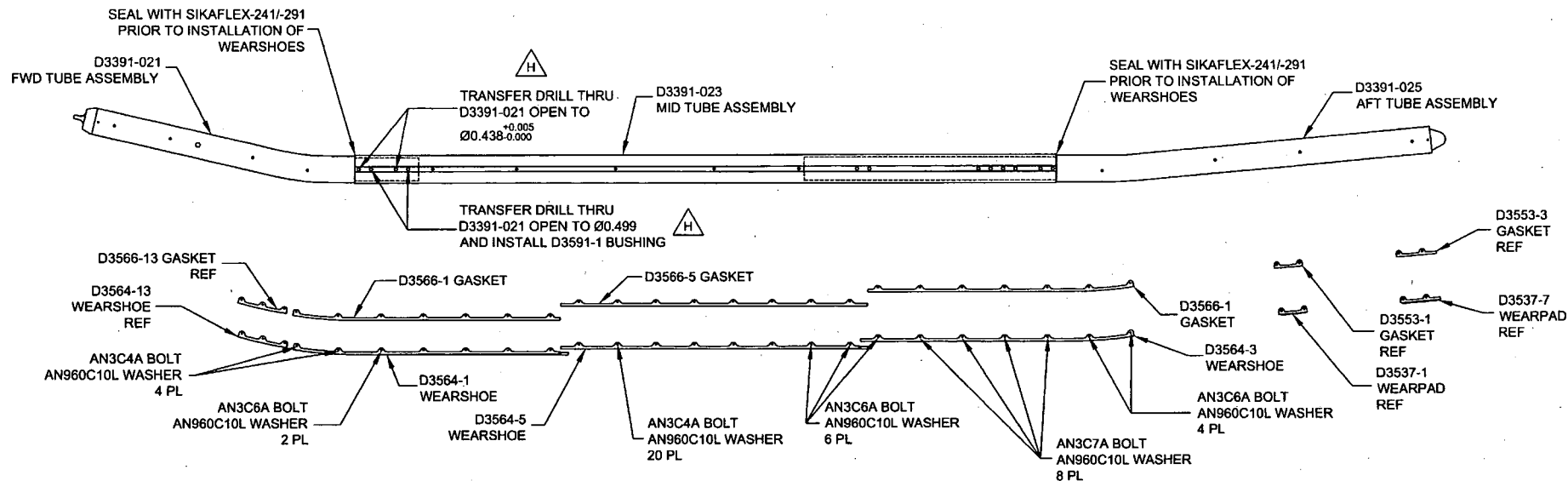
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3391-043 ASSEMBLY

D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
.043		
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

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DE APPR.		412 FLOAT SKIDTUBE	NTS
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50102

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08-09-25-10

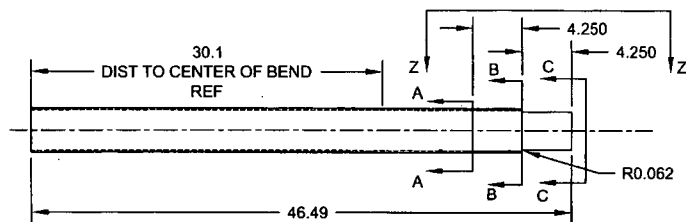
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

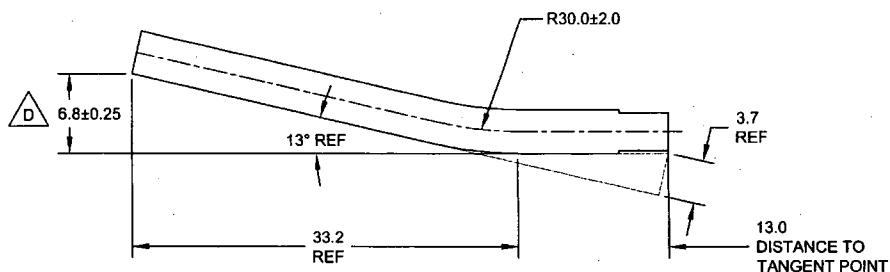
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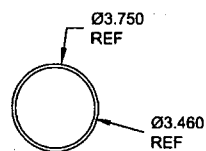
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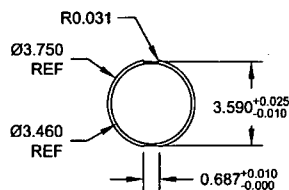
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



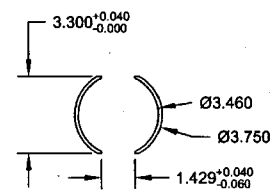
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



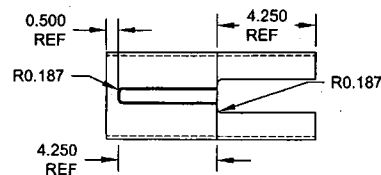
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X



VIEW Z-Z
SCALE 2X

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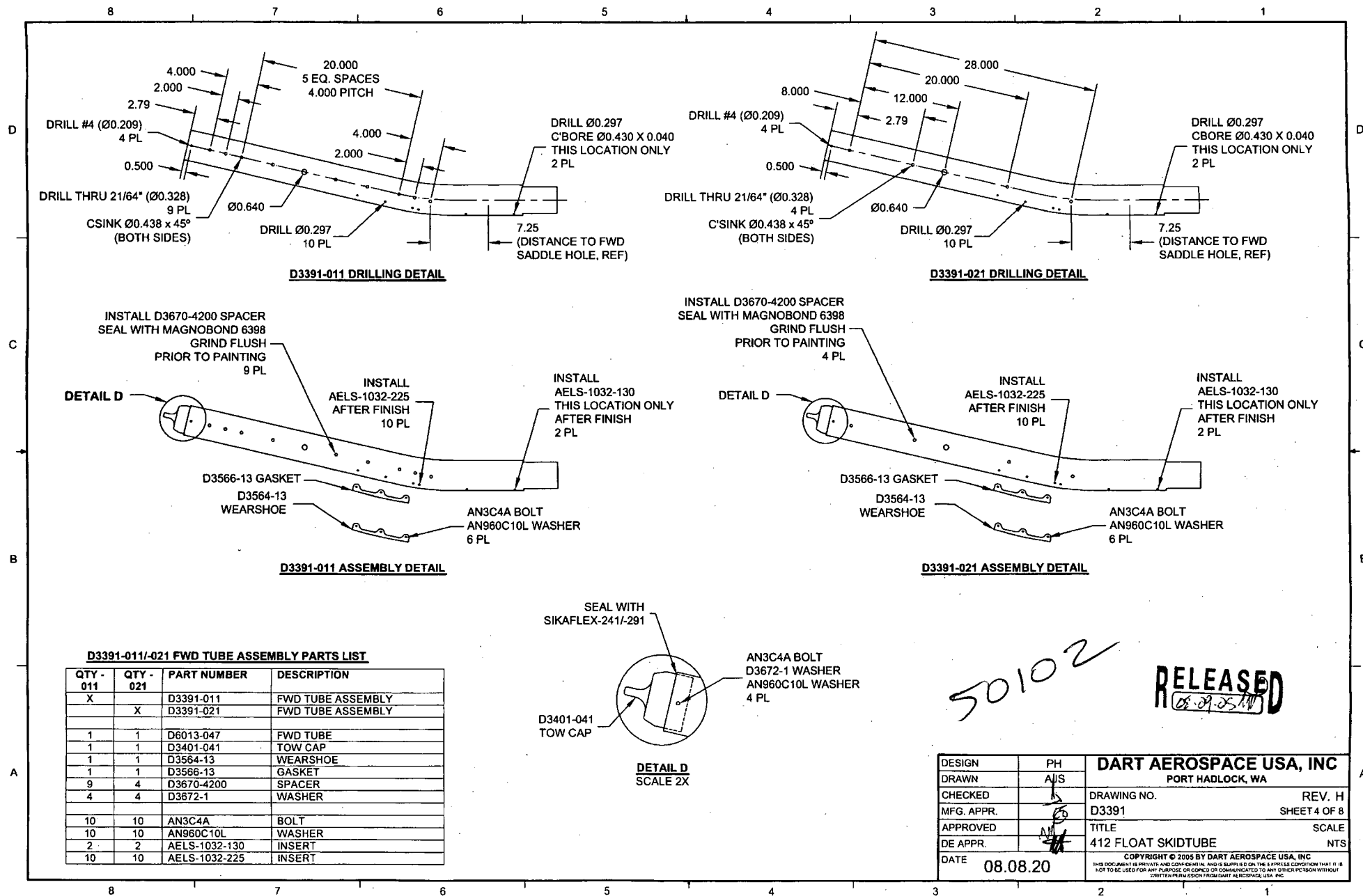
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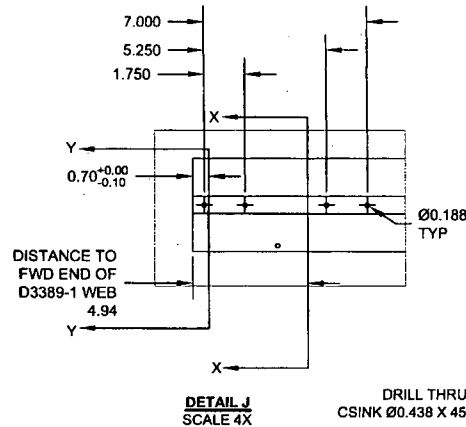
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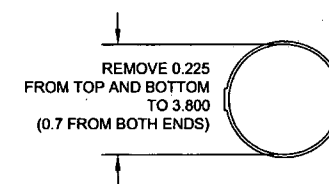
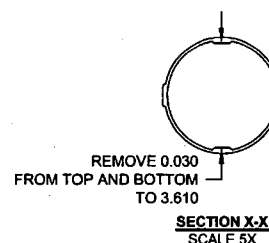
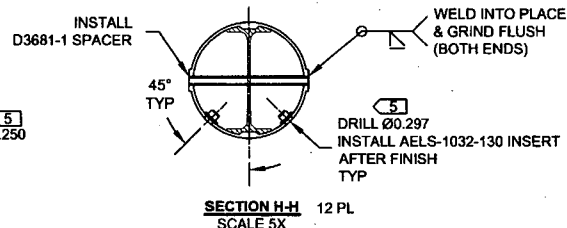
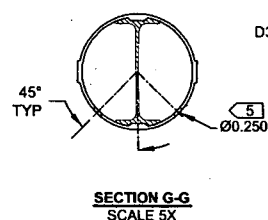
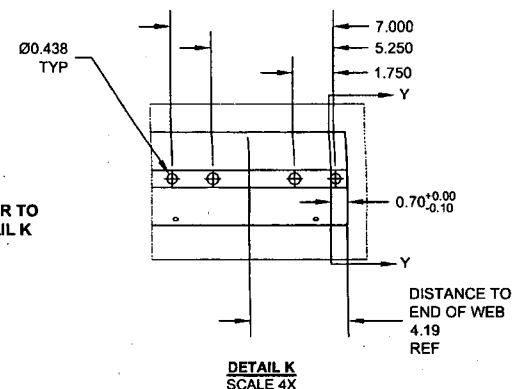
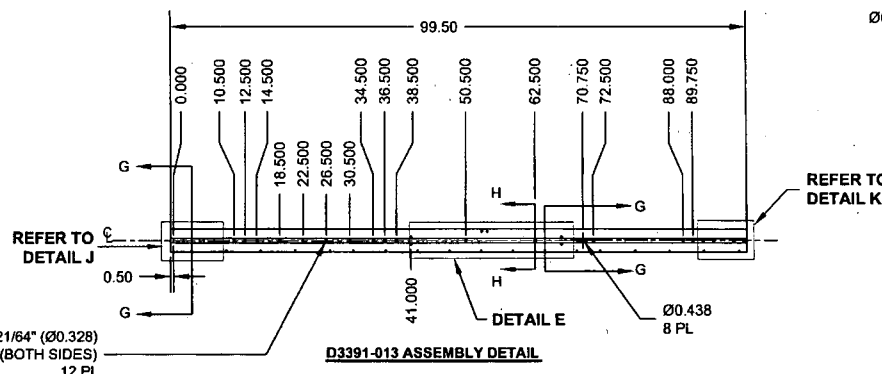
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DRILL THRU 21/64" (Ø0.328)
CSINK Ø0.438 X 45° (BOTH SIDES)
12 PL

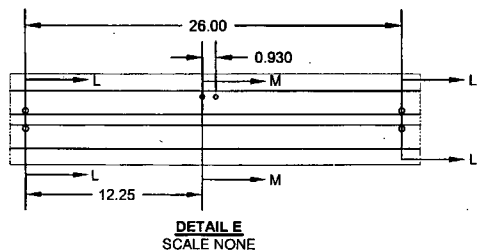


D3391-013 MID TUBE ASSEMBLY PARTS LIST

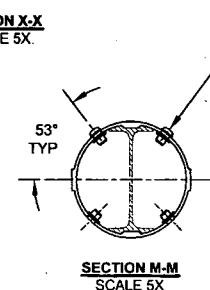
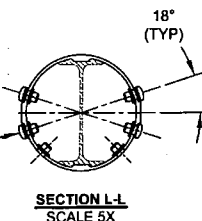
QTY	PART NUMBER	DESCRIPTION
-013		
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

D3391-013 MID TUBE ASSEMBLY

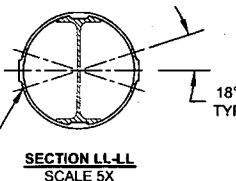
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004



DRILL Ø0.391
INSTALL ALS4-428-165 INSERT
MS27039C4-08 SCREW
D3672-3 WASHER
AN960C416L WASHER
AFTER FINISH
4 PL



DRILL Ø0.250
4 PL



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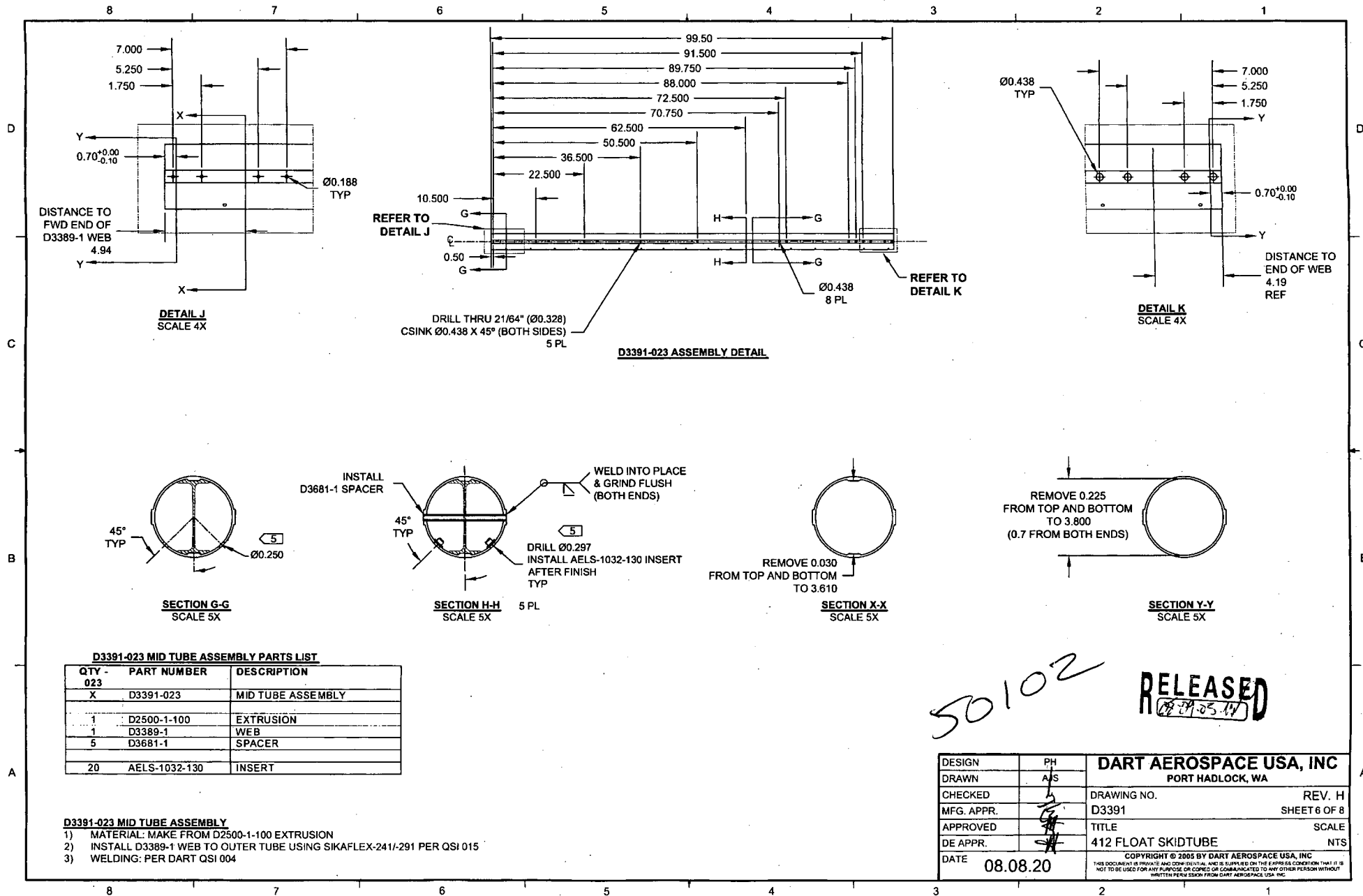
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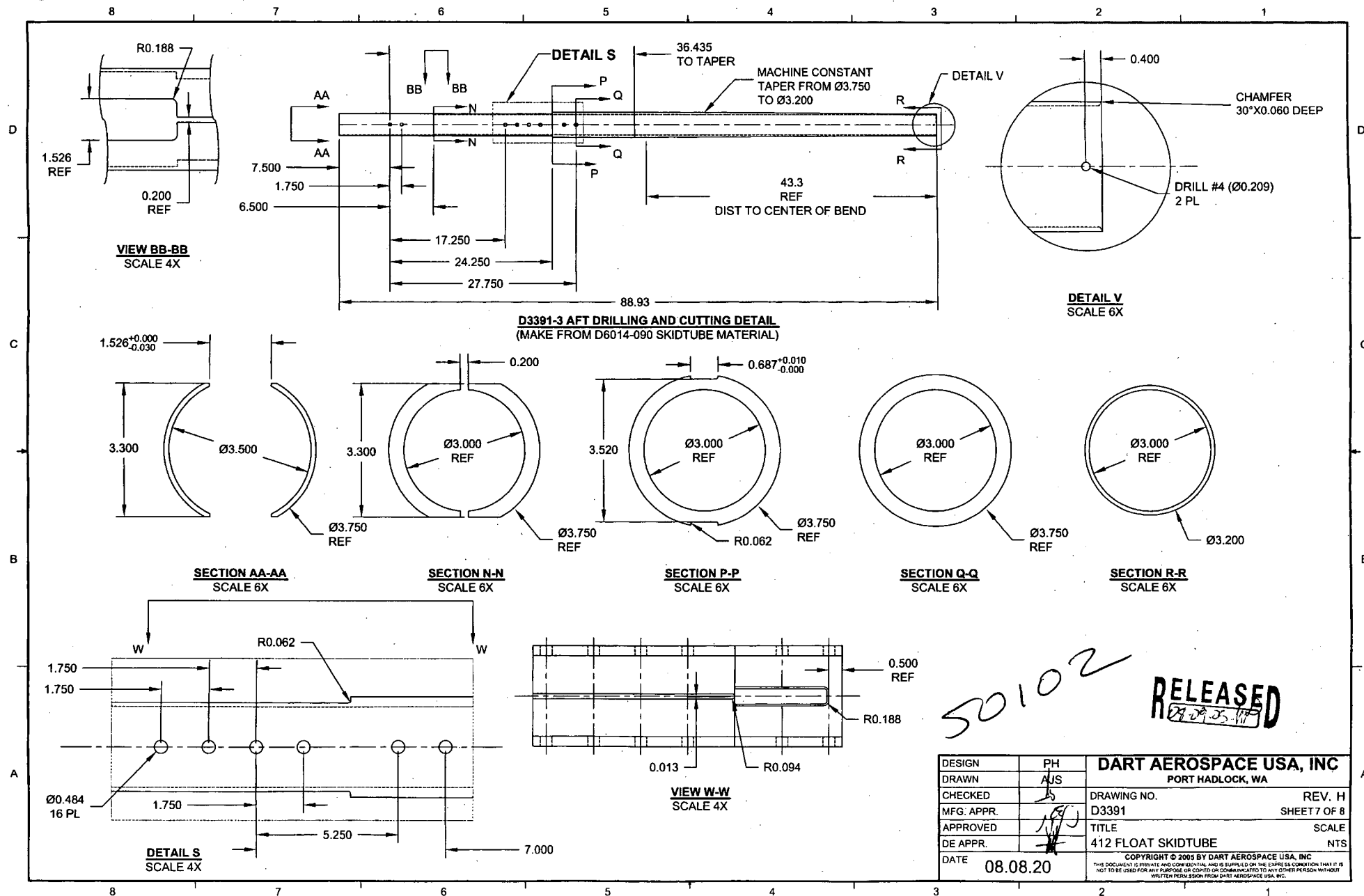
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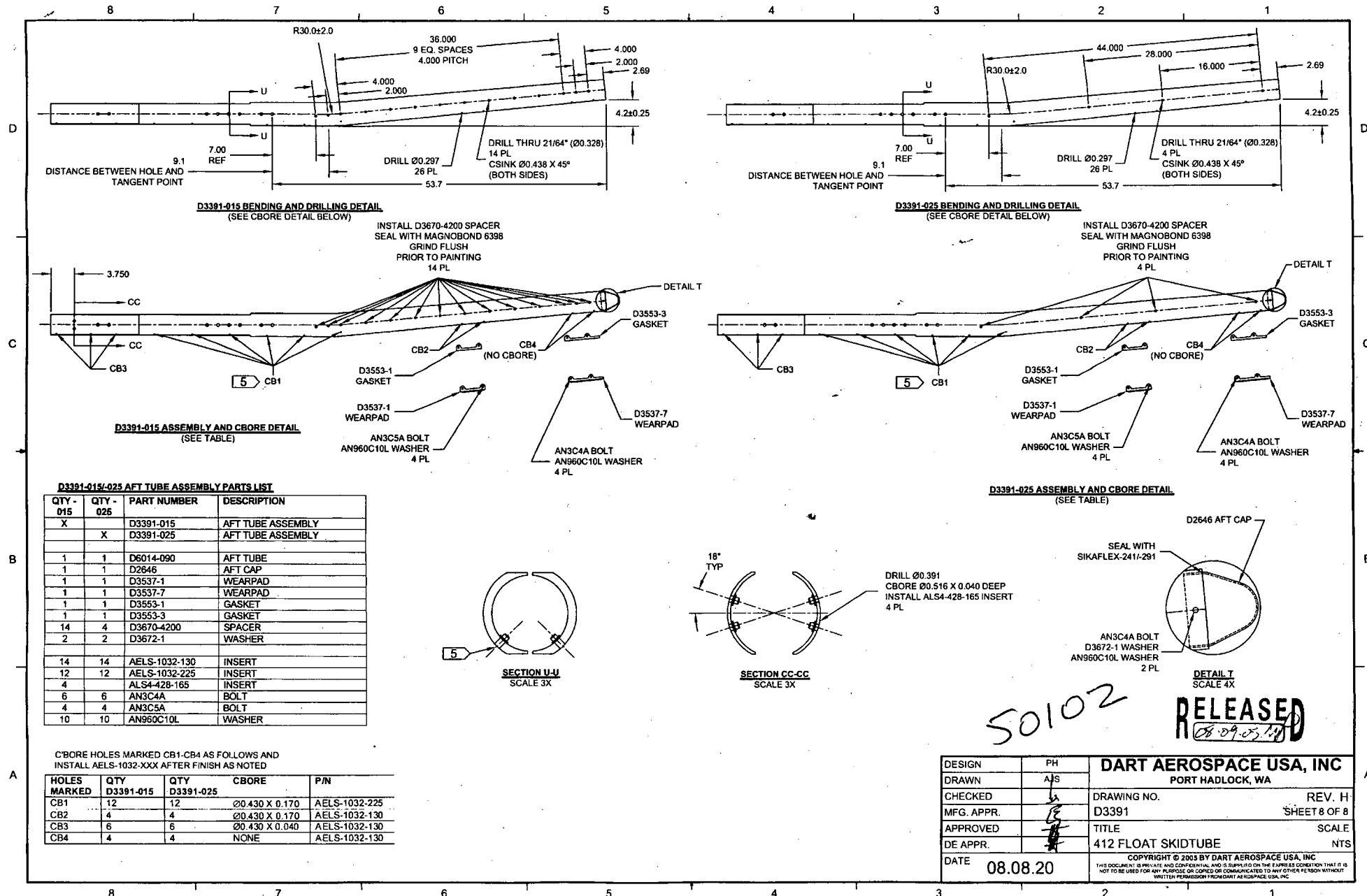
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